

WHAT IS CLAIMED IS:

1. A liquid crystal display device comprising:
 - a pair of substrates disposed in opposition to each other with a liquid crystal interposed therebetween;
 - a sealing material which secures one of the substrates to the other and seals the liquid crystal; and
 - an organic material layer formed in at least an area surrounded by the sealing material on the one of the substrates,
 - a non-formation region of the organic material layer being provided in the vicinity of the sealing material.
2. A liquid crystal display device according to Claim 1, wherein the non-formation region is a region between the sealing material and the outer outline of an aggregation of pixels disposed in matrix form.
3. A liquid crystal display device according to Claim 2, wherein the sealing material has a rectangular pattern and the non-formation region of the organic material layer is provided at least one corner of the sealing material.
4. A liquid crystal display device according to Claim 1, wherein a switching element and a pixel electrode are provided in each pixel area surrounded by adjacent ones of gate signal lines and adjacent ones of drain signal lines all of which are formed on a liquid-crystal-side surface of the one of the substrates, the switching element being operated by a scanning signal supplied from one of the adjacent gate signal lines, the pixel electrode being supplied with a video signal from one of the adjacent drain signal lines via the switching element, the organic material layer being a protective film formed to cover the switching element.
5. A liquid crystal display device according to Claim 1, wherein the organic material layer constitutes a black matrix layer.

6. A liquid crystal display device according to Claim 1, wherein the organic material layer constitutes a color filter layer.
7. A liquid crystal display device according to Claim 1, wherein the organic material layer is a leveling film formed to cover a black matrix layer and a color filter layer.
8. A liquid crystal display device comprising:
 - a pair of substrates disposed in opposition to each other with a liquid crystal interposed therebetween;
 - a sealing material which secures one of the substrates to the other and seals the liquid crystal;
 - a sealant applied to a part of the sealing material to seal the sealing material after the liquid crystal has been injected; and
 - an organic material layer formed in at least an area surrounded by the sealing material on the one of the substrates,
 - a non-formation region of the organic material layer being provided in the vicinity of the sealing material on a side opposite to a side where the sealant is provided.
9. A liquid crystal display device according to Claim 8, wherein the non-formation region is a region between the sealing material and the outer outline of an aggregation of pixels disposed in matrix form.
10. A liquid crystal display device according to Claim 9, wherein the sealing material has a rectangular pattern and the non-formation region of the organic material layer is provided at a corner formed by one side of the sealing material opposite to the sealant and another side intersecting with the one side.
11. A liquid crystal display device according to Claim 8, wherein a switching element and a pixel electrode are provided in each pixel area surrounded by adjacent ones of gate signal lines and adjacent ones of drain signal lines all of which are formed on a liquid-crystal-side surface of the one of the substrates, the switching element being operated by a scanning signal supplied from one of the adjacent gate signal lines, the pixel

electrode being supplied with a video signal from one of the adjacent drain signal lines via the switching element, the organic material layer being a protective film formed to cover the switching element.

12. A liquid crystal display device according to Claim 8, wherein the organic material layer constitutes a black matrix layer.
13. A liquid crystal display device according to Claim 8, wherein the organic material layer constitutes a color filter layer.
14. A liquid crystal display device according to Claim 8, wherein the organic material layer is a leveling film formed to cover a black matrix layer and a color filter layer.
15. A liquid crystal display device comprising:
 - a pair of substrates disposed in opposition to each other with a liquid crystal interposed therebetween; and pixel areas formed on a liquid-crystal-side surface of one of the substrates,
 - each of the pixel areas including:
 - a switching element operated by a scanning signal supplied from a gate signal line;
 - a pixel electrode supplied with a video signal from a drain signal line via the switching element;
 - a counter electrode which causes an electric field to be generated between the counter electrode and the pixel electrode;
 - an organic insulating layer formed to cover the switching element, at least one of the pixel electrode and the counter electrode being formed in a layer overlying the organic insulating layer; and
 - a sealing material which surrounds at least an aggregation of the pixel areas to secure one of the substrates to the other and seal the liquid crystal,
 - a non-formation region of the organic material layer being provided in the vicinity of the sealing material.

16. A liquid crystal display device according to Claim 15, wherein each of the pixel electrode and the counter electrode is made of a plurality of stripe-shaped electrodes and the electrode formed in the layer overlying the organic insulating layer includes five or more electrodes per pixel area.
17. A liquid crystal display device according to Claim 15, wherein each of the pixel electrode and the counter electrode is made of a plurality of stripe-shaped electrodes and the electrode formed in the layer overlying the organic insulating layer is spaced apart from another adjacent electrode by a distance of 13 μm or less.
18. A liquid crystal display device according to Claim 15, wherein each of the pixel electrode and the counter electrode is made of a plurality of stripe-shaped electrodes and the extending direction of the electrode formed in the layer overlying the organic insulating layer is approximately coincident with the direction of a side of the sealing material on which a sealant is formed.
19. A liquid crystal display device comprising:
 - a pair of substrates disposed in opposition to each other with a liquid crystal interposed therebetween; and
 - pixel areas formed on a liquid-crystal-side surface of one of the substrates, each of the pixel areas including:
 - a switching element operated by a scanning signal supplied from a gate signal line;
 - a pixel electrode supplied with a video signal from a drain signal line via the switching element;
 - a counter electrode which causes an electric field to be generated, between the counter electrode and the pixel electrode;
 - an organic insulating layer formed to cover the switching element, at least one of the pixel electrode and the counter electrode being formed in a layer overlying the organic insulating layer; and
 - a sealing material which surrounds at least an aggregation of the pixel areas to secure one of the substrates to the other and seal the liquid crystal,

each of the pixel electrode and the counter electrode being made of a plurality of stripe-shaped electrodes and the electrode formed in the layer overlying the organic insulating layer includes five or more electrodes per pixel area.

20. A liquid crystal display device comprising:

a pair of substrates disposed in opposition to each other with a liquid crystal interposed therebetween; and

pixel areas formed on a liquid-crystal-side surface of one of the substrates, each of the pixel areas including:

a switching element operated by a scanning signal supplied from a gate signal line;

a pixel electrode supplied with a video signal from a drain signal line via the switching element;

a counter electrode which causes an electric field to be generated between the counter electrode and the pixel electrode;

an organic insulating layer formed to cover the switching element, at least one of the pixel electrode and the counter electrode being formed in a layer overlying the organic insulating layer; and

a sealing material which surrounds at least an aggregation of the pixel areas to secure one of the substrates to the other and seal the liquid crystal,

each of the pixel electrode and the counter electrode being made of a plurality of stripe-shaped electrodes and the electrode formed in the layer overlying the organic insulating layer is spaced apart from another adjacent electrode by a distance of 13 μm or less.

21. A liquid crystal display device comprising:

a pair of substrates disposed in opposition to each other with a liquid crystal interposed therebetween;

a sealing material which secures one of the substrates to the other and seals the liquid crystal;

an organic insulating layer formed in at least an area surrounded by the sealing material on the one of the substrate;

a first sealant formed to close a liquid crystal injection hole in the sealing material; and

a second sealant formed to close an exhaust hole through which gas from the liquid crystal is released.

22. A liquid crystal display device according to Claim 21, wherein the sealing material has a rectangular pattern having four sides, and the first sealant and the second sealant are respectively formed on different sides.

23. A liquid crystal display device comprising:

a pair of substrates disposed in opposition to each other with a liquid crystal interposed therebetween;

a sealing material which secures one of the substrates to the other and seals the liquid crystal; and

an organic insulating layer formed in at least an area surrounded by the sealing material on the one of the substrates,

a liquid crystal injection hole being formed in part of the sealing material, and a non-formation region of the organic material layer being provided in and near the liquid crystal injection hole.

24. A liquid crystal display device comprising:

a pair of substrates disposed in opposition to each other with a liquid crystal interposed therebetween;

a sealing material which secures one of the substrates to the other and seals the liquid crystal; and

an organic insulating layer formed in at least an area surrounded by the sealing material on the one of the substrates,

a liquid crystal injection hole being formed in part of the sealing material, and a non-formation region of the organic material layer being provided in the vicinity of the sealing material within an area surrounded by the liquid crystal injection hole and the sealing material.

25. A liquid crystal display device comprising:

a pair of substrates disposed in opposition to each other with a liquid crystal interposed therebetween;

a sealing material which secures one of the substrates to the other and seals the liquid crystal; and

an organic insulating layer formed in at least an area surrounded by the sealing material on the one of the substrates,

a liquid crystal injection hole being formed in part of the sealing material, and a non-formation region of the organic material layer being provided in and near the liquid crystal injection hole and a region in which the sealing material is formed.

26. A liquid crystal display device according to Claim 23, wherein the organic material layer and an inorganic material layer positioned to underlie the organic material layer constitute a protective film.
27. A liquid crystal display device according to Claim 23, wherein an aggregation of pixel areas is formed in the area surrounded by the sealing material and the non-formation region of the organic material layer being provided in an area outside the aggregation of the pixel areas.
28. A liquid crystal display device according to Claim 24, wherein the organic material layer and an inorganic material layer positioned to underlie the organic material layer constitute a protective film.
29. A liquid crystal display device according to Claim 25, wherein the organic material layer and an inorganic material layer positioned to underlie the organic material layer constitute a protective film.
30. A liquid crystal display device according to Claim 24, wherein an aggregation of pixel areas is formed in the area surrounded by the sealing material and the non-formation region of the organic material layer being provided in an area outside the aggregation of the pixel areas.

31. A liquid crystal display device according to Claim 25, wherein an aggregation of pixel areas is formed in the area surrounded by the sealing material and the non-formation region of the organic material layer being provided in an area outside the aggregation of the pixel areas.
32. A liquid crystal display device according to Claim 26, wherein an aggregation of pixel areas is formed in the area surrounded by the sealing material and the non-formation region of the organic material layer being provided in an area outside the aggregation of the pixel areas.
33. A liquid crystal display device according to Claim 28, wherein an aggregation of pixel areas is formed in the area surrounded by the sealing material and the non-formation region of the organic material layer being provided in an area outside the aggregation of the pixel areas.
34. A liquid crystal display device according to Claim 29, wherein an aggregation of pixel areas is formed in the area surrounded by the sealing material and the non-formation region of the organic material layer being provided in an area outside the aggregation of the pixel areas.